

IS YOUR FACILITY READY FOR HACCP?

A. Considerations Before Implementing HACCP

Of course, improving food safety commonly involves some cost and does not guarantee future cost savings. For this reason, many companies are initially hesitant to implement HACCP since money and resources are usually limiting factors. The development, implementation and maintenance of a HACCP system is a major commitment that will require time, money and other resources. It is highly recommended that you do some preliminary assessments to determine if HACCP is right for your company. The following considerations will help you with your assessment.

Ask yourself:

- Do you have a thorough understanding of your facility and its operations?
- Why do you want to implement HACCP?
- What resources would be required to implement HACCP in your facility?
- What are the costs and benefits of implementing HACCP in your facility?

Quiz: Do You Have a Thorough Understanding of Your Facility

Statement	Yes or No?
1. I can describe all the products manufactured in my facility.	
2. I can list the main ingredients, incoming materials (e.g., processing aids) and packaging materials of all of these products.	
3. I can describe the processes used for all of these products.	
4. I can describe the main food safety hazards (chemical, biological, physical, cross-contamination) of all of the products and processes in my facility.	
5. I can describe the purpose of each piece of equipment in my facility and how each is used.	
6. I understand the maintenance and calibration requirements of each piece of equipment in my facility.	
7. I am fully aware of the physical condition (e.g., state of repair) of my facility inside and out.	
8. I understand how each area of my facility is used.	
9. I can describe the flow of people and products through my facility.	
10. I understand the role each employee plays in the processing of products, and the handling of products, ingredients	

How did you score?

If you answered "Yes" to all of the above, you have a thorough understanding of your facility that will assist you to develop a successful HACCP system. If, however, you were not able to answer "Yes" at this point to all of the above, now is the time to gain a greater understanding, before you are too far into the development of your HACCP system. Failing to gain a greater understanding of your facility will hinder and jeopardize your HACCP system. For example, you may misunderstand certain hazards, overlook key areas of cross-contamination or miss the impact of certain employees.

B. Why Do You Want to Implement HACCP?

You have read about the common benefits of HACCP listed in previous articles; now you can estimate the benefits your company could expect from HACCP implementation. Take some time to realistically set out your specific goals. Write these down, and go back to them from time to time. Perhaps HACCP certification is necessary to simply maintain

your current markets and avoid sale losses. Or perhaps you have experienced losses that could have been mitigated by HACCP, such as too-frequent recalls.

Some components, such as increased buyer confidence, will be difficult to measure. You may need to estimate the value of these intangibles in more general terms. You may also want to speak with others who have implemented HACCP to gain a better understanding of potential benefits.

To help you define your goals, a sample is provided below.

Table 2.1: HACCP Expectations

Goal	How HACCP would achieve goal	Benefit
Increase sales	HACCP certification required by key buyer(s)	Increased profits
Reduce recalls	Detecting problems through monitoring before shipment	Reduced costs

C. What Resources Will Be Required to Implement HACCP in Your Facility?

To determine the resources needed in your facility, you need to be aware of some of the potential costs of HACCP.

i. Factors Affecting the Costs of HACCP

There are undoubtedly some costs associated with the implementation of HACCP; however, these costs vary significantly depending upon several factors. The first two to consider are the number of products and processes in your facility, and their associated risks. You should also consider the condition of your facility and equipment, and your employee food safety training.

a. Number of products and processes

In general, the greater the number of products and the more varied these products, the greater number of HACCP plans required. Furthermore, the more complex your process, the more work required for HACCP plan development and implementation. If your operation is simple (e.g., producing one product by few processing steps) you may need only one simple HACCP plan.

b. Associated risks (food safety hazards) of your products, ingredients and processes

When considering the associated food safety risks of your products you should think about:

- The intended use (e.g., ready-to-eat, further processed) and intended consumer
- The risks associated with ingredients including the use of restricted ingredients and the presence of allergens.

You should also consider any hazards introduced during processing. The more risks inherent to the product and introduced during processing, the more controls required in your HACCP system.

c. Condition of your facility

The existing condition of your facility can have a great impact on the costs of HACCP implementation. If, for example, the building structure is old, with surfaces that are not cleanable or that allow the entry of pests, you may require significant capital upgrades. If, however, your facility is currently in a better condition, you may require few structural or surface changes.

d. State of your equipment

The state of your current equipment is also relevant to the costs of HACCP. HACCP requires equipment that is accurate and that consistently achieves the intended purpose

(e.g., oven temperature). Equipment, particularly pieces that come into contact with food, ingredients or packaging materials, must also be cleanable and in a good state of repair. Any deficiencies in the state of your equipment must be addressed through repair, adjustments or replacements. You may also need to purchase new equipment for certain monitoring processes (e.g., a thermometer that can be calibrated, pH meter, and metal detector).

e. Level of food safety understanding and training of your employees

All employees need to have a firm understanding of food safety and sufficient training to conduct their HACCP responsibilities. In estimating your costs for training, you should consider the:

- Number and positions of employees
- Current or recent food safety training
- Number of languages commonly understood
- Employee turnover rate.

ii. One-Time Costs and Recurring Costs

The costs for the development, implementation and maintenance of a successful HACCP system fall into two general categories: one time and recurring.

One-time costs are usually those associated with the planning, development and implementation of the HACCP system.

Recurring costs are those incurred from maintenance activities such as training, record keeping and monitoring, and updating. You cannot avoid or skimp on these recurring costs; for a successful HACCP system with continued recognition and certification, these activities must be done.

iii. Estimating Costs in your Facility

Once you have a basic understanding of HACCP and understand the potential costs, assess your operation to estimate the resources required. At this early stage you may not have enough information to completely and thoroughly estimate recurring costs, but do attempt to include some general estimates for ongoing training, record keeping and monitoring, and updating your system. As you determine the necessary resources for your situation, you may find it useful to develop a table like the sample (Table 2.2).

The costs to consider include the following:

- Need for facility upgrades and construction
- Need for new or modified equipment
- Need for supportive materials (e.g., logbooks, software, measuring devices)
- New staff wages or consultant fees, if required
- Labour and time of existing staff for development, training, record keeping and monitoring, maintenance and updating.

Table 2.2 Estimating Costs for HACCP System Development, Implementation, and Maintenance

Resource item Input	Input (e.g., upgrades, purchases, fees, wages)	Estimated costs
Facility structures		
Equipment		
Food safety training		
Supporting materials		
Hiring new staff or consultants		
Monitoring activities (labour)		
Updating system		

D. What Are the Costs and Benefits of HACCP for Your Facility?

With realistic goals, expectations and estimates of resources and costs in hand, you can now conduct a basic cost-benefit analysis of HACCP for your facility. You will compare the estimates of costs with the estimates of benefits to determine if HACCP implementation will, in the end, be profitable for your company.